

CLAIMS

What is claimed:

1. A method for throttling a rate set of data, where the rate set for the data is determined by a temperature of a communication device, the method comprising:

monitoring the temperature of the communication device as the communication device transmits the data to a second communication device; and

throttling the rate set of the data when the temperature of the communication device exceeds an acceptable temperature.

2. A method for throttling a rate set of data as recited in Claim 1, wherein the acceptable temperature is in a range from about -45 degrees Celsius to about 70 degrees Celsius.

3. A method for throttling a rate set of data as recited in Claim 1, wherein the rate set is 14.4 kilobits/sec.

4. A method for throttling a rate set of data as recited in Claim 1, wherein the rate set is 9.6 kilobits/sec.

5. A method for throttling a rate set of data as recited in Claim 1, wherein the operation of throttling the rate set further includes:

reducing a duty cycle of the rate set by half.

6. A method for throttling a rate set of data as recited in Claim 5, wherein the duty cycle is an amount of time used to transmit the data to the second communication device at the rate set.

7. A method for throttling a rate set of data as recited in Claim 1, wherein the operation of throttling the rate set further includes:

reducing an output power of the rate set by half.

8. A method for throttling a rate set of data as recited in Claim 7, wherein the output power is an amount of power used as the communication device transmits data to the second communication device.

9. A method for throttling a rate set of data as recited in Claim 1, wherein the communication device is a wireless modem.

10. A method for throttling a rate set of data as recited in Claim 9, wherein wireless communication of the wireless modem is completed using code division multiple access (CDMA).

11. A method for throttling a rate set of data as recited in Claim 10, wherein the wireless communication of the wireless modem is done with time division multiple access (TDMA).

12. A method for throttling a rate set of data as recited in Claim 1, the method further comprising:

maintaining continuous communication between the communication device and the second communication device as the rate set is throttled.

13. A method for throttling a rate set of data as recited in Claim 1, wherein the temperature is monitored using a temperature monitor.

14. A method for throttling a rate set of data as recited in Claim 13, wherein the temperature monitor is a thermistor.

15. A rate set throttler for a communication device, where the rate set throttler throttles a rate set of data for the communication device in accordance with a temperature of the communication device as the communication device communicates with a second communication device, the rate set throttler comprising:

a temperature monitor which monitors the temperature of the communication device as the communication device transmits the data; and

a throttle which regulates the rate set of the data being transmitted when the temperature monitor determines that the temperature of the communication device exceeds an acceptable limit.

16. A rate set throttler for a communication device as recited in Claim 15, wherein the temperature monitor is a thermistor.

17. A rate set throttler for a communication device as recited in Claim 15, wherein the throttle regulates the rate set of the data by reducing a duty cycle of the rate set by half.

18. A rate set throttler for a communication device as recited in Claim 17, wherein the duty cycle is an amount of time used to transmit the data at the rate set to the second communication device.

19. A rate set throttler for a communication device as recited in Claim 15, wherein the throttle regulates the rate set of the data by reducing an output power of the rate set by half.

20. A rate set throttler for a communication device as recited in Claim 19, wherein the output power is an amount power used as the data is being transmitted at the rate set to the second communication device.

21. A rate set throttler for a communication device as recited in Claim 15 wherein the acceptable limit of the temperature of the communication device ranges from about -45 degrees Celsius to about 70 degrees Celsius.

22. A rate set throttler for a communication device as recited in Claim 15, wherein the communication device is a wireless modem.

23. A rate set throttler for a communication device as recited in Claim 15, wherein the communication between the wireless modem and the second communication device is not interrupted when the throttle regulates the rate set of the data.

24. A rate set throttler for a communication device as recited in Claim 15, wherein the throttle decreases a temperature increase rate of the communication device.

25. A method for regulating a temperature increase rate of a communication device as the communication device is communicating with a second communication device, the communication device communicating with the second communication device at a rate set, the method comprising:

determining the temperature of the communication device as the communication device communicates with the second communication device; and

throttling the rate set of the communication device if the temperature of the communication device exceeds an acceptable temperature during the communication.

26. A method for regulating a temperature increase rate of a communication device as recited in Claim 25, wherein the acceptable temperature is in a range of about -45 degrees Celsius to about 70 degrees Celsius.

27. A method for regulating a temperature increase rate of a communication device as recited in Claim 25, the method further comprising:

maintaining the communication between the communication device and the second communication device as the rate set is throttled.

28. A method for regulating a temperature increase rate of a communication device as recited in Claim 25, wherein the operation of throttling the rate set further comprises:

reducing a duty cycle of the rate set by half.

29. A method for regulating a temperature increase rate of a communication device as recited in Claim 28, wherein the duty cycle is an amount of time used as the communication device transmits data to the second communication device at the rate set.

30. A method for regulating a temperature increase rate of a communication device as recited in Claim 29, wherein the amount of time is in a range of about 20 milliseconds to about 40 milliseconds.

31. A method for regulating a temperature increase rate of a communication device as recited in Claim 25, wherein the operation of throttling the rate set further comprises:

reducing an output power of the rate set by half.

32. A method for regulating a temperature increase rate of a communication device as recited in Claim 31, wherein the output power is an amount of power

consumed as the communication device transmits data to the second communication device at the rate set.

33. A method for regulating a temperature increase rate of a communication device as recited in Claim 32, wherein the output power is in a range of about 3 watts to about 4 watts.

34. A method for regulating a temperature increase rate of a communication device as recited in Claim 25, wherein the communication device is wireless.

35. A method for regulating a temperature increase rate of a communication device as recited in Claim 34 wherein wireless communication of the wireless communication device is done using code division multiple access (CDMA).

36. A method for regulating a temperature increase rate of a communication device as recited in Claim 34, wherein wireless communication of the wireless communication device is completed using time division multiple access (TDMA).

37. A method for regulating a temperature increase rate of a communication device as recited in claim 25, wherein the temperature increase rate is the rate at which the temperature of the communication device increases.